Name: Id#

ICS 103, Term 092

Computer Programming in C

Quiz# 2

Date: Sunday, April 11, 2010

**Q1.** Determine the output of the following program:

**#include <stdio.h>**

**int main(void) {**

**int number, digits, sum;**

**digits=sum=0;**

**number=12345;**

**do {**

**sum+=number%10;**

**number=number/10;**

**digits++;**

**}while(number>0);**

**printf("%d\n%d\n",digits,sum);**

**return 0;**

**}**

**Q2.** Rewrite the following shaded part using while loop instead of for loop:

**#include <stdio.h>**

**int main(void) {**

**int i, j, p;**

**for(i=1, j=1, p=0;i<50 && j < 20;i\*=2, j++)**

**p+=i+2\*j;**

**return 0;**

**}**

**Q3.** The value of π can be determined by the series equation:



Write a program that takes the **number of terms** as input and returns an approximation of the value of π for the given number of terms.